Listing and Amendments to the Claims

This listing of claims will replace the claims that were published in the PCT Application:

1. (currently amended) A broadcast router, comprising:

a first reference input ~~(146)~~;

a second reference input ~~(148)~~;

a reference select circuit ~~(144)~~ coupled to said first and second reference inputs; and

at least one router component ~~(134, 136, 138, 140 or 142)~~ coupled to said reference select circuit ~~(144)~~;

wherein said reference select circuit ~~(144)~~: (1) passes a first signal applied to said first reference input ~~(146)~~ to said at least one router component ~~(134, 136, 138, 140 or 142)~~ as a first reference signal and a second signal applied to said second reference input ~~(148)~~ to said at least one router component ~~(134, 136, 138, 140 or 142)~~ as a second reference signal upon determining that said first and second signals are error-free; (2) passes said first signal to said at least one router component ~~(134, 136, 138, 140 or 142)~~ as said first reference signal and as said second reference signal upon determining that said first signal is error-free and said second signal is not error-free; and (3) passes said second signal to said at least one router component ~~(134, 136, 138, 140 or 142)~~ as said first reference signal and as said second reference signal upon determining that said first signal is not error-free and said second signal is error-free.

2. (currently amended) The apparatus of claim 1, wherein said at least one router component ~~(134, 136, 138, 140 or 142)~~ further comprises a router matrix ~~(134)~~.

3. (currently amended) The apparatus of claim 1, wherein said at least one router component ~~(134, 136, 138, 140 or 142)~~ further comprises a transmit expansion port ~~(136)~~.

4. (currently amended) The apparatus of claim 1, wherein said at least one router component ~~(134, 136, 138, 140 or 142)~~ further comprises at least one receive expansion port ~~(138, 140, 142)~~.

5. (currently amended) A broadcast router, comprising:

a router matrix ~~(102a)~~ having an input side ~~(102a-1)~~ and an output side ~~(102a-2)~~;

N data inputs coupled to said input side ~~(102a-1)~~ of said router matrix ~~(102a)~~, each one of said N data inputs configured for providing an input data stream to said router matrix ~~(102a)~~;

M data outputs coupled to said output side ~~(102a-2)~~ of said router matrix ~~(102a)~~, each one of said M data outputs configured for providing an output data stream from said router matrix ~~(102a)~~;

a first reference input ~~(146)~~ coupled to said input side ~~(102a-1)~~ of said router matrix ~~(102a)~~ said first reference input ~~(146)~~ configured for application of a first reference signal thereto; and

a second reference input ~~(148)~~ coupled to said input side ~~(102a-1)~~ of said router matrix ~~(102a)~~, said second reference input ~~(148)~~ configured for selective application of either a second reference signal or a redundancy of said first reference signal thereto.

6. (currently amended) The apparatus of claim 5, wherein said broadcast router further comprises a routing engine ~~(134)~~ coupled between said N data inputs and said M data outputs, said routing engine ~~(134)~~ configured to apply selected ones of said N data inputs to said M data outputs.

7. (currently amended) The apparatus of claim 6, wherein said broadcast router further comprises a reference select circuit ~~(144)~~ coupled between said first and second reference inputs ~~(146 and 148)~~ and said routing engine ~~(134)~~, said reference select circuit ~~(144)~~ configured to pass a first signal applied to said first reference input ~~(146)~~ to said routing engine ~~(134)~~ as a first reference signal and a second signal applied to said second reference input ~~(148)~~ to said routing engine ~~(134)~~ as a second reference signal upon determining that said first and second signals are error-free; (2) pass said first signal to said routing engine ~~(134)~~ as said first reference signal and as said second reference signal upon determining that said first signal is error-free and said second signal is not error-free; and (3) pass said second signal to said routing engine ~~(134)~~ as said first reference signal and as said second reference signal upon determining that said first signal is not error-free and said second signal is error-free.

8. (currently amended) A method for selectively providing multiple or redundant reference inputs to a broadcast router ~~(102a)~~, comprising:

providing a broadcast router ~~(102a)~~ having first and second reference inputs ~~(146 and 148)~~;

applying a first reference signal to said first reference input ~~(146)~~;

if a user desires that said broadcast router ~~(102a)~~ operate with redundant reference signals, applying said first reference signal to said second reference input ~~(148)~~; and

if said user desires that said broadcast router ~~(102a)~~ operate with multiple reference signals, applying a second reference signal to said second reference input ~~(148)~~.

9. (currently amended) The method of claim 8, and further comprising:

providing a broadcast router ~~(102)~~ having a reference select circuit ~~(144)~~ to which said first and second reference inputs ~~(146, 148)~~ are fed, said reference select circuit ~~(144)~~ configured to pass signals applied to said first reference input ~~(146)~~ to reference signal-demanding components ~~(134, 136, 138, 140 or 142)~~ of said broadcast router ~~(102)~~ as a first reference signal and signals applied to said second reference input ~~(148)~~ to said reference signal-demanding components ~~(134, 136, 138, 140 or 142)~~ of said broadcast router ~~(102)~~ as a second reference input upon determining that said signals applied to said first and second reference inputs ~~(146, 148)~~ are error-free; (2) pass signals applied to said first reference input ~~(146)~~ to said reference signal-demanding components ~~(134, 136, 138, 140 or 142)~~ of said broadcast router ~~(102)~~ as said first reference input and as said second reference input upon determining that signals applied to said first reference input ~~(146)~~ are error-free but signals applied to said second reference input ~~(148)~~ are not error-free; and (3) pass signals applied to said second reference input ~~(148)~~ to said reference signal-demanding components ~~(134, 136, 138, 140 or 142)~~ of said broadcast router ~~(102)~~ as said first reference input and as said second reference input upon determining that signals applied to said first reference input ~~(146)~~ are not error-free but signals applied to said second reference input ~~(148)~~ are error free.

10. (currently amended) The method of claim 9, wherein said reference signal-demanding components ~~(134, 136, 138, 140 or 142)~~ are reference signal-insensitive.